

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

**CIRBA INC. (d/b/a DENSIFY)
and CIRBA IP, INC.,**

Plaintiffs,

v.

VMWARE, INC.,

Defendant.

C.A. No. 19-742-LPS

REDACTED - PUBLIC VERSION
SEAL PURSUANT TO D. DEL. LR
26.2

**DEFENDANT VMWARE'S SUPPLEMENTAL BRIEF IN OPPOSITION TO
CIRBA'S MOTION FOR A PRELIMINARY INJUNCTION**

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I. INTRODUCTION

VMware’s initial answering brief (D.I. 48) showed why Cirba’s motion for a preliminary injunction should be denied, and expedited discovery has only reinforced that showing. The recently developed evidence confirms that Cirba cannot make its required demonstration of likelihood of success on the merits and irreparable harm. Discovery also supports that the balance of hardships and public interest favor VMware.

II. CIRBA CANNOT SHOW IT IS LIKELY TO SUCCEED ON THE MERITS

A. The asserted claims of the ’687 patent are invalid under § 101.

As VMware explained in its motion to dismiss (D.I. 80; *see also* D.I. 48 at 8-9), the asserted claims merely claim the abstract idea of collecting and analyzing data but lack an inventive concept. Cirba’s expert, Vijay Madisetti, confirmed this at his deposition. When asked why claim 7’s method could not be practiced using pen and paper in a simple virtual environment, Dr. Madisetti offered only vague statements about the method’s complexity. He could not tie this complexity to any claim requirement. (Ex. 25 at 207:16-216:16.)¹ Nor could he point to any claimed improvement in computer technology. (*Id.*)

Dr. Madisetti also sketched out his reading of claim 7. (*Id.* at 207:11-208:7; Ex. 26.) His drawing confirms that the invention constitutes patent-ineligible data collection (“data” based on “metrics”) and analysis (“optimization” using “rule[s]” pertaining to “business,” “technical,” and “workload” constraints, from which “suboptimal” placements are identified). (*See* Ex. 26.)

B. VMware’s 2006 DRS technology anticipates the asserted claims under § 102.

VMware’s expert, Dr. Nieh, explained how VMware’s own 2006 DRS technology anticipates the asserted claims. (D.I. 50 ¶¶ 153-175; *see also* D.I. 48 at 9-10.) At his deposition five weeks after Dr. Nieh’s declaration, Dr. Madisetti claimed to still be working on his analysis.

¹ All “Ex.” citations are to exhibits to the Supplemental Declaration of Jennifer Luh.

(Ex. 25 at 152:11-155:18, 156:21-157:3.)

When pressed for his opinion “regarding whether DRS 2006 invalidates” the ’687 patent, he opined that DRS lacked “host-based tagging” and “tags for business intent” before vROps 7.0. (*Id.* at 151:6-152:12.) But the asserted claims do not require “tags,” so their presence or absence is irrelevant.

C. The Ji patent and Raman article render the asserted claims obvious.

Dr. Nieh also explained how the Ji patent and the Raman article render the asserted claims obvious. As to the “business constraint” requirement of the asserted claims, Dr. Nieh noted that Raman’s software licensing constraints meet this limitation. (D.I. 50 ¶¶ 177, 182-184, 188; *see also* D.I. 48 at 9-11.) Dr. Nieh’s opinions are consistent with the ’687 specification (at 7:34-55), which expressly identifies “software license agreements” as a “business parameter.”

At his deposition, Dr. Madisetti volunteered that Raman does not disclose “business constraints” because it does not show using software licensing controls to reduce costs: “[I]f you use the license the way Raman uses it, it’s not a business constraint.” (*See* Ex. 25 at 222:17-225:9.) Here, too, Dr. Madisetti’s critique relies on mischaracterizing the scope of the patent’s claims. The ’687 patent does not limit business constraints by whether a party seeks cost savings. Instead, it explains that business constraints concern “‘what should go together,’ both from a business and a process perspective.” (’687 patent, 26:23-43.) Plainly, Raman matches computing processes to hosts in order to comply with a license, which is such a constraint. (*See* D.I. 50 ¶¶ 177, 182-184, 188.)

D. The ’687 patent lacks written description support for the “each” limitation.

VMware’s written description defense relates to the “each” limitation (*e.g.*, [7b]) that was added to all asserted claims through an amendment in prosecution: “evaluating each virtual guest against each virtual host and other virtual guests using one or more rule sets pertaining to said

technical, business and workload constraints.” (See D.I. 50 at Ex. 6.)

The full scope of the claim language “evaluating each virtual guest against . . . *other virtual guests*” is broader than the specification’s disclosure. While this language permits analyzing each virtual guest against “*other*” (*i.e.*, a subset of) virtual guests, the ’687 patent’s specification discloses this analysis only against *all* other virtual guests. (D.I. 50 ¶¶ 198-202.) In its initial answering brief, VMware noted that the asserted claims thus lack written description under 35 U.S.C. § 112 for the “each” limitation. (D.I. 48 at 9 n.3.)

Discovery has confirmed this. When asked how the specification supports the “each” limitation, Andrew Hillier (a named inventor and Cirba’s CTO) testified that Figures 30 and 31 describe “*all* the hosts and guests [] being scored against each other.” (Ex. 27 at 181:25-183:7.) He also testified that Figure 13 provides the “clearest articulation” for this step, depicting “a series of computations that result in an ‘NxN’ workload score.” (*Id.* at 183:4-19.) An “NxN” computation evaluates each guest against all others, not a subset. (See D.I. 50 ¶¶ 201-202.) Mr. Hillier did not identify any portion of the specification disclosing evaluation of each guest against fewer than all other virtual guests in the virtual environment, which the claims cover.

Dr. Madisetti, too, confirmed this deficiency when asked to identify support for the “each” limitation. He pointed only to pages 5 and 6 of the provisional application. (Ex. 25 at 235:22-242:3; Ex. 28.) But these pages only describe evaluating physical servers—not “virtual guests.” In fact, these pages do not refer to analyzing “virtual guests” at all. (*Id.*)

E. vROps v.7 does not meet the “each” limitation of the asserted claims.

Discovery also confirmed that vROps v.7 does not infringe for the reasons VMware previously identified. (See D.I. 48 at 11-15.) At his deposition, Dr. Madisetti could not substantiate vROps v.7’s satisfaction of the “each” limitation as to the required “technical” and “workload” constraints.

1. Dr. Madisetti could not show that vROps v.7 evaluates each virtual guest using technical constraints.

Dr. Madisetti's infringement theory assumes that vROps implements specific "technical constraints":

- **Guest-to-host:** To satisfy the requirement that "each virtual guest [be evaluated] against each virtual host," virtual guests must be placed "on a specific host because it stores data on the local disk" (D.I. 13 ¶ 117); and
- **Guest-to-guests:** To satisfy the requirement that "each virtual guest [be evaluated] against . . . other virtual guests," virtual guests must "share data" (*id.* ¶ 118).

Dr. Nieh showed that Dr. Madisetti's declaration cited no evidence that either technical constraint is present in vROps v.7. (D.I. 50 ¶ 101, 126.) When deposed, Dr. Madisetti still could not identify specific evidence supporting this theory. (Ex. 25 at 130:19-147:11, 173:4-182:6, 250:25-252:11; Exs. 29, 30.) Absent such support, vROps v.7 cannot infringe. (*See* D.I. 48 at 12-14.)

2. Dr. Madisetti's reliance on vROps v.7 for workload constraints confirms that it does not satisfy the "each" limitation.

The "each" limitation relates to "guest-host placements" as recited in the asserted claims, not guest-cluster placements. (*See* D.I. 48 at 14-15.) In his declaration, Dr. Nieh explained that vROps evaluates virtual machines ("VMs") only to determine *cluster* placements. VMware's DRS, by contrast, handles guest-host placements, *i.e.*, VM placements on hosts within a particular cluster. (D.I. 50 ¶¶ 96-117.) DRS is a separate product from vROps. As the asserted claims are directed to VM-host placement, and only vROps is accused, VMware cannot infringe.

At his deposition, Dr. Madisetti confirmed that Cirba's infringement theory relies on vROps for VM-host placements. When asked to identify the claimed rule sets for "workload constraints" in the accused system, Dr. Madisetti referred only to vROps functionality. (Ex. 25 at 253:7-260:19.) But even Dr. Madisetti's evidence showed only guest-cluster placements. For

example, he pointed to a cluster balancing rule to maximize headroom:

Cluster Headroom [—] Headroom establishes a required capacity buffer, for example, 20 percent. It provides you with an extra level of control and ensures that you have extra space for growth inside the cluster when required.

(Ex. 29 at 319; Ex. 25 at 255:4-260:14.) This rule expressly relates to VM-cluster placements, not VM-host placements. Cirba must identify the latter to show infringement, and it cannot do so. As Dr. Madisetti points to nothing in vROps v.7 for VM-host placements under workload constraints, vROps cannot infringe the “each” limitation. (*See also* D.I. 50 ¶¶ 88, 96-101, 104, 107-109, 112-115.)

III. CIRBA’S CLAIM OF IRREPARABLE HARM CAUSED BY VMWARE’S ALLEGED INFRINGEMENT IS BASELESS

Discovery also has revealed that Cirba over-dramatized its claim of [REDACTED]. Harm is likely to be remote, unrelated to the alleged infringement, and remediable by damages.

A. Cirba Delayed Filing Suit.

Contrary to Cirba’s representations, its delay in filing suit was more than a “few months.” (D.I. 12 at 22.) Immediately after vROps 7.0 was announced, Cirba [REDACTED] [REDACTED] (*See, e.g.*, Ex. 31.) In August 2018—even before vROps v.7 was released, [REDACTED] [REDACTED] (Ex. 32.) In September 2018, [REDACTED] [REDACTED] (Ex. 33 at 180:8-11.) By fall 2018, [REDACTED] [REDACTED] (Ex. 27 at 141:13-142:7.) And by “late fall” or “early winter” 2018, [REDACTED] [REDACTED]. (*Id.* at 148:21-149:9.) [REDACTED] [REDACTED] (*Id.* at 149:10-151:1, 152:16-25.)

In view of the foregoing, Cirba’s representation that:

[T]he [REDACTED] commercial impact of vROps v7 [did not] manifest[] itself [until] the first four months of 2019[,] [REDACTED] ...

is not credible. (D.I. 12 at 21.) Having waited 9 months after vROps v.7's release and 5 months

[REDACTED] Cirba cannot plausibly claim imminent irreparable harm.

B. Cirba's Alleged Harm Has No Nexus with VMware's Alleged Infringement.

Discovery made the absence of a "sufficiently strong causal nexus" between VMware's alleged infringement and Cirba's alleged harm abundantly clear. (D.I. 48 at 19.) Cirba's "Densify" product and the accused vROps v.7 are complex multi-feature products, and the allegedly patented feature is just one of many. As Cirba has not shown that the accused feature drives consumer demand, it cannot show irreparable harm. (*Id.*)

1. Customers are not using the accused feature.

In its moving papers, Cirba implied that [REDACTED]

[REDACTED]

(*See, e.g.*, D.I. 12 at 19-20; D.I. 14 ¶¶ 32, 87, 120.) That implication, too, has proven false.

Cirba's witnesses [REDACTED]

[REDACTED] (*See* Ex. 27 at 113:10-19, 185:15-21; Ex. 34 at 23:12-25:10,

27:23-28:8; Ex. 35 ¶ 13.) If Cirba [REDACTED]

then VMware's alleged infringement by offering a similar feature cannot be causing Cirba

[REDACTED]—as Cirba's opening brief alleges seven times. (D.I. 12 at 1, 2, 3, 8, 11, 21,

22.) [REDACTED]

[REDACTED]

[REDACTED]

2. Densify and vROps are multi-feature products.

Cirba also cannot show that the accused feature drives demand because Densify and

vROps include many valuable features unrelated to the accused functionality. (*See* Exs. 37, 38.)

[REDACTED] (*See, e.g.*, Ex. 33 at 59:7-60:24; Ex. 27 at 24:10-

25:1, 48:23-50:15.) [REDACTED]

[REDACTED]. (Ex. 32.) [REDACTED]

[REDACTED]

[REDACTED] (Ex. 27 at 23:21-24:8.) [REDACTED]

[REDACTED] (Ex. 32; Ex. 27 at 159:2-6.) [REDACTED]

[REDACTED] (Ex. 39 at 53.) [REDACTED]

[REDACTED]

[REDACTED] (Ex. 34 at 43:15-44:22.) [REDACTED]

[REDACTED] (*Id.* at 15:11-16:8.)

As for vROps v.7, [REDACTED]

[REDACTED] (Ex. 33 at 11:9-14.) Its CTO explained that [REDACTED]

[REDACTED]

[REDACTED]

(Ex. 27 at 73:4-76:19, 85:24-86:24, 92:25-93:21, 99:16-100:11.) VMware's witness also

highlighted important unaccused features. (Ex. 40 [REDACTED]

[REDACTED] Ex. 41 at 103:12-21.)

[REDACTED]

[REDACTED] (Ex. 32; Ex. 39 at DSYPDF0000012-15.) As Cirba cannot show that the accused

feature is more important than others, the accused feature cannot drive demand.

3. [REDACTED] because of the accused feature.

Cirba's claim that the [REDACTED] because of the
accused feature has proven to be complete speculation. [REDACTED]

[REDACTED] (Ex. 33 at 230:6-17.) [REDACTED]
[REDACTED] (*Id.* at 192:8-
15.) [REDACTED] (D.I. 12 at 10):

- [REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]” (D.I. 12 at 10). [REDACTED]
[REDACTED] (Ex. 42.) [REDACTED]
[REDACTED]. (*Id.*)

The “drastic and extraordinary remedy” of a preliminary injunction cannot be granted “on presumptions alone.” *Riverbed Tech., Inc. v. Silver Peak Sys., Inc.*, No. CV 11-484-RGA, 2014 WL 4695765, at *12-*13 (D. Del. Sept. 12, 2014). But Cirba offers nothing more.

4. [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
(Ex. 33 at 84:17-85:17; Ex. 43.) [REDACTED]
[REDACTED] *see* Ex. 44), not VMware’s introduction of the accused feature.
[REDACTED]
[REDACTED]. (Ex. 33 at 83:16-23;
Ex. 43.) [REDACTED]

[REDACTED] (Ex. 33 at 83:24-84:11; Ex. 43.)

5. Cirba’s non-economic harm remains entirely speculative.

VMware previously explained that Cirba’s alleged non-economic harm is speculative. (D.I. 48 at 22.) Discovery only made that clearer, as Cirba offered zero additional supporting evidence. When pressed for evidence, Mr. Hillier referred only to his prior speculative declaration. (Ex. 27 at 278:9-279:20; D.I. 14 ¶¶ 128-129, 131.)

6. Cirba’s primary competitor also offers the accused feature.

The existence of other competitors “weighs against [a] . . . claim of irreparable harm.” *TeleSign Corp. v. Twilio, Inc.*, No. CV 15-3240 PSG (SSX), 2015 WL 12532491, at *7 (C.D. Cal. Oct. 19, 2015). Despite implying that it and VMware are the only players, [REDACTED]

[REDACTED] (Ex. 33 at 98:4-8.)

Turbonomic also offers a software licensing control feature. (*Id.* at 110:17-111:3; Ex. 45 (Turbonomic’s “rule assignment allow[s] you to keep your VMs from wandering to hosts they are not licensed for”); Ex. 46 (“Workload placement policies” using “[a]ffinity or anti-affinity rules for a group of VMs (possibly for licensing reasons)”).) By 2016, [REDACTED]

[REDACTED]. (Ex. 47 at

GS0000175.) [REDACTED]. (Ex. 39 at

DSYPDF000016-24 [REDACTED]

[REDACTED] with impunity—undercuts its claim.

C. Cirba’s Alleged Harm Is Calculable.

Discovery also has proven false Cirba’s claim that a “trial of this case only for damages . . . cannot fully remedy the harm to Densify.” (D.I. 12 at 3.) [REDACTED]

[REDACTED] (Ex. 33 at 78:21-25; Ex. 44.) Any harm therefore is readily calculable.

IV. THE BALANCE OF EQUITIES AND PUBLIC INTEREST WEIGH AGAINST AN INJUNCTION.

Cirba seeks a broad injunction against vROps v.7 as a whole, not just the accused feature. (D.I. 11 at 2; D.I. 48 at 24.) But the evidence shows that such an overbroad injunction would harm the public and VMware. In view of Cirba's weak showings, however, even a tailored injunction is unwarranted.

An injunction would be against the public interest, as it would "restrict its choice [of] solutions." *Finjan, Inc. v. Blue Coat Sys., LLC*, No. 15-CV-03295-BLF, 2016 WL 6873541, at *9 (N.D. Cal. Nov. 22, 2016) (denying injunction.) For VMware, an injunction would cause loss of goodwill and reputational harm. It would detract from VMware's reputation as an innovator, which Cirba concedes based on VMware's development of the hypervisor. (D.I. 12 at 7.)

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] This harm would not be readily compensable. *See Am. Cyanamid Co. v. U.S. Surgical Corp.*, 833 F. Supp. 92, 133 (D. Conn. 1992) (balance of equities favored defendant, which "could not be adequately compensated for its losses in reputation.")

V. CONCLUSION

The evidence developed during expedited discovery confirms that (i) the '687 patent is invalid on multiple independent grounds, (ii) vROps does not satisfy the "each" limitation, and (iii) the harm from vROps' continued sales would not be [REDACTED]. It also shows that [REDACTED] or VMware's products for the accused feature, [REDACTED]. [REDACTED] Cirba's motion for the extraordinary remedy of a preliminary injunction should therefore be denied.

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CERTIFICATE OF SERVICE

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